AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims.

1. (Currently Amended) A method for treating an individual, comprising administering an effective amount of a METH1 polypeptide comprising an amino acid sequence selected from the group consisting of:

(a) amino acids 1 to 950 in SEQ ID NO:2;

(b) amino acids 2 to 950 in SEQ ID NO:2;

(c) amino acids 29 to 950 in SEQ ID NO:2;

(d) amino acids 30 to 950 in SEQ ID NO:2;

(e) the complete amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209581;

(f) the mature amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209581; and

(g) amino acids 1 to 968 of SEQ ID NO:125;

or a METH2 polypeptide comprising an amino acid sequence selected from the group consisting of:

(h) amino acids 1 to 890 in SEQ ID NO:4;

(i) amino acids 2 to 890 in SEQ ID NO:4;

(j) amino acids 24 to 890 in SEQ ID NO:4;

(k) amino acids 112 to 890 in SEQ ID NO:4;

(l) the complete amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209582;

(m) the mature amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209582;

(n) amino acids 214 to 439 in SEQ ID NO:4;

(o) amino acids 440 to 529 in SEQ ID NO:4;

(p) amino acids 530 to 583 in SEQ ID NO:4;

(q) amino acids 837 to 890 in SEQ ID NO:4;

(r) amino acids 280 to 606 in SEQ ID NO:4; and

(s) amino acids 529 to 548 in SEQ ID NO:4,

wherein said polypeptide is capable of inhibiting angiogenesis and said method is used to treat benign tumors, an ocular angiogenic disease, vasculogenesis, granulations, hypertrophic scars, nonunion fractures, scleroderma, trachoma, vascular adhesions, myocardial angiogenesis, coronary collaterals, cerebral collaterals, arteriovenous malformations, ischemic limb angiogenesis, Osler-Webber Syndrome, plaque neovascularization, hemophiliac joints, angiofibroma, fibromuscular dysplasia, wound granulation, or atherosclerosis.

2. (Previously Presented) A method for treating an individual, comprising administering an effective amount of a METH1 polypeptide comprising an amino acid sequence selected from the group consisting of:

(a) amino acids 1 to 950 in SEQ ID NO:2;

(b) amino acids 2 to 950 in SEQ ID NO:2;

(c) amino acids 29 to 950 in SEQ ID NO:2;

(d) amino acids 30 to 950 in SEQ ID NO:2;

(e) the complete amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209581;

(f) the mature amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209581; and

(g) amino acids 1 to 968 of SEQ ID NO:125;

or a METH2 polypeptide comprising an amino acid sequence selected from the group consisting of:

(h) amino acids 1 to 890 in SEQ ID NO:4;

(i) amino acids 2 to 890 in SEQ ID NO:4;

(j) amino acids 24 to 890 in SEQ ID NO:4;

(k) amino acids 112 to 890 in SEQ ID NO:4;

(l) the complete amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209582;

(m) the mature amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209582;

(n) amino acids 214 to 439 in SEQ ID NO:4;

(o) amino acids 440 to 529 in SEQ ID NO:4;

(p) amino acids 530 to 583 in SEQ ID NO:4;

(q) amino acids 837 to 890 in SEQ ID NO:4;

(r) amino acids 280 to 606 in SEQ ID NO:4; and

(s) amino acids 529 to 548 in SEQ ID NO:4,

wherein said polypeptide is capable of inhibiting angiogenesis and said method is used in birth control.

3. (Original) The method of claim 1, further comprising administering another angiogenic compound.

4. (Canceled)

5. (Previously Presented) A method for treating an individual, comprising administering an effective amount of a METH2 polypeptide comprising an amino acid sequence selected from the group consisting of:

(a) amino acids 1 to 890 in SEQ ID NO:4;

(b) amino acids 2 to 890 in SEQ ID NO:4;

(c) amino acids 24 to 890 in SEQ ID NO:4;

(d) amino acids 112 to 890 in SEQ ID NO:4;

(e) the complete amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209582;

(f) the mature amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209582;

(g) amino acids 214 to 439 in SEQ ID NO:4;

(h) amino acids 440 to 529 in SEQ ID NO:4;

(i) amino acids 530 to 583 in SEQ ID NO:4;

(j) amino acids 837 to 890 in SEQ ID NO:4;

(k) amino acids 280 to 606 in SEQ ID NO:4; and

(l) amino acids 529 to 548 in SEQ ID NO:4,

wherein said polypeptide is capable of inhibiting angiogenesis and said method is used to treat benign tumors, an ocular angiogenic disease, vasculogenesis, granulations, hypertrophic scars, nonunion fractures, scleroderma, trachoma, vascular adhesions, myocardial angiogenesis, coronary collaterals, cerebral collaterals, arteriovenous malformations, ischemic limb

angiogenesis, Osler-Webber Syndrome, plaque neovascularization, hemophiliac joints, angiofibroma, fibromuscular dysplasia, wound granulation, or atherosclerosis.

6. (Previously Presented) A method for treating an individual, comprising administering an effective amount of a METH2 polypeptide comprising an amino acid sequence selected from the group consisting of:

(a) amino acids 1 to 890 in SEQ ID NO:4;

(b) amino acids 2 to 890 in SEQ ID NO:4;

(c) amino acids 24 to 890 in SEQ ID NO:4;

(d) amino acids 112 to 890 in SEQ ID NO:4;

(e) the complete amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209582;

(f) the mature amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 209582;

(g) amino acids 214 to 439 in SEQ ID NO:4;

(h) amino acids 440 to 529 in SEQ ID NO:4;

(i) amino acids 530 to 583 in SEQ ID NO:4;

(j) amino acids 837 to 890 in SEQ ID NO:4;

(k) amino acids 280 to 606 in SEQ ID NO:4; and

(l) amino acids 529 to 548 in SEQ ID NO:4,

wherein said polypeptide is capable of inhibiting angiogenesis and said method is used in birth control.

7. (Previously Presented) The method of claim 5, further comprising administering another angiogenic compound.

8. (Canceled)

9. (Previously Presented) The method of claim 5, wherein the amino acid sequence of the METH2 polypeptide comprises (a).

10. (Previously Presented) The method of claim 5, wherein the amino acid sequence of the METH2 polypeptide comprises (b).

11. (Previously Presented) The method of claim 5, wherein the amino acid sequence of the METH2 polypeptide comprises (c).

12. (Previously Presented) The method of claim 5, wherein the amino acid sequence of the METH2 polypeptide comprises (d).

13. (Previously Presented) The method of claim 5, wherein the amino acid sequence of the METH2 polypeptide comprises (e).

14. (Previously Presented) The method of claim 5, wherein the amino acid sequence of the METH2 polypeptide comprises (f).

15. (Previously Presented) The method of claim 5, wherein the amino acid sequence of the METH2 polypeptide comprises (g).

16. (Previously Presented) The method of claim 5, wherein the amino acid sequence of the METH2 polypeptide comprises (h).

17. (Previously Presented) The method of claim 5, wherein the amino acid sequence of the METH2 polypeptide comprises (i).

18. (Previously Presented) The method of claim 5, wherein the amino acid sequence of the METH2 polypeptide comprises (j).

19. (Previously Presented) The method of claim 5, wherein the amino acid sequence of the METH2 polypeptide comprises (k).

20. (Previously Presented) The method of claim 5, wherein the amino acid sequence of the METH2 polypeptide comprises (l).

21. (Previously Presented) The method of claim 6, wherein the amino acid sequence of the METH2 polypeptide comprises (a).

22. (Previously Presented) The method of claim 6, wherein the amino acid sequence of the METH2 polypeptide comprises (b).

23. (Previously Presented) The method of claim 6, wherein the amino acid sequence of the METH2 polypeptide comprises (c).

24. (Previously Presented) The method of claim 6, wherein the amino acid sequence of the METH2 polypeptide comprises (d).

25. (Previously Presented) The method of claim 6, wherein the amino acid sequence of the METH2 polypeptide comprises (e).

26. (Previously Presented) The method of claim 6, wherein the amino acid sequence of the METH2 polypeptide comprises (f).

27. (Previously Presented) The method of claim 6, wherein the amino acid sequence of the METH2 polypeptide comprises (g).

28. (Previously Presented) The method of claim 6, wherein the amino acid sequence of the METH2 polypeptide comprises (h).

29. (Previously Presented) The method of claim 6, wherein the amino acid sequence of the METH2 polypeptide comprises (i).

30. (Previously Presented) The method of claim 6, wherein the amino acid sequence of the METH2 polypeptide comprises (j).

31. (Previously Presented) The method of claim 6, wherein the amino acid sequence of the METH2 polypeptide comprises (k).

32. (Previously Presented) The method of claim 6, wherein the amino acid sequence of the METH2 polypeptide comprises (l).